



ABSTRACT OF THE DISCLOSURE

1
2
3
4
5
6
7
8
9
10
11
12
13

Waxes prepared from hydrogenated plant oils, such as palm and soybean, are used to render cellulosic materials resistant to water. Unlike cellulosic materials rendered water resistant with waxes obtained using petroleum-derived or synthetic waxes, the water resistant cellulosic materials prepared using this composition are recyclable using conventional paper recycling methods; the composition is dispersible in warm water solutions. Such water resistant materials are characterized by enhanced moisture barrier properties. The compositions have a low iodine value (between 2-5), and melting points between approximately 120-165 degrees F (Mettler Drop Point). The wax comprises a triglyceride whose fatty acids are predominantly stearic acid (C_{18}). The composition is used as an additive in the manufacture of wax coated boxes and adhesive compounds used in boxboard packaging and manufacturing operations.